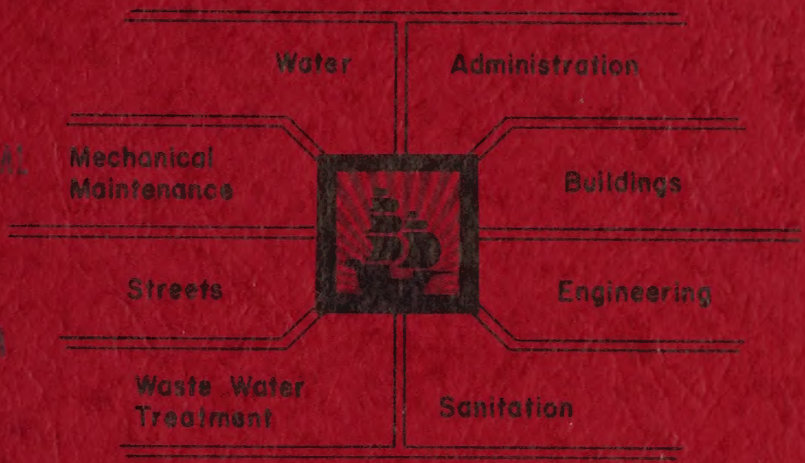
A0183
1982-1983

Department of
Public Works



INSTITUTE OF GOVERNMENTAL
FEB 29 1984
UNIVERSITY OF CALIFORNIA

1982-83
Annual Report

City of Santa Maria

CITY OF SANTA MARIA • 110 EAST COOK STREET • SANTA MARIA, CALIFORNIA 93454 • 805-925-0951

Public Works Department

October 1, 1983

Mr. Robert F. Grogan
City Administrator
City of Santa Maria
110 East Cook Street
Santa Maria, CA 93454

Dear Bob:

It is with a great deal of pleasure that this fiscal year report for 1982-83, which is the thirteenth in a continuing series of this type, is transmitted. Contained in this report for recordation are the significant departmental activities which have occurred during this time period.

We have attempted to include in this report material of statistical and historical value, as well as information of personal interest.

It is appropriate here to express our gratitude to the rest of the City staff for the cooperation and assistance which contributed to our departmental accomplishments. We are even more grateful for the sympathy and understanding that was received for our failures. We look forward to the continuing opportunity to make a contribution toward the total City government's service to its community.

Very truly yours,

Reese N. Riddiough

REESE N. RIDDIOUGH
Director of Public Works

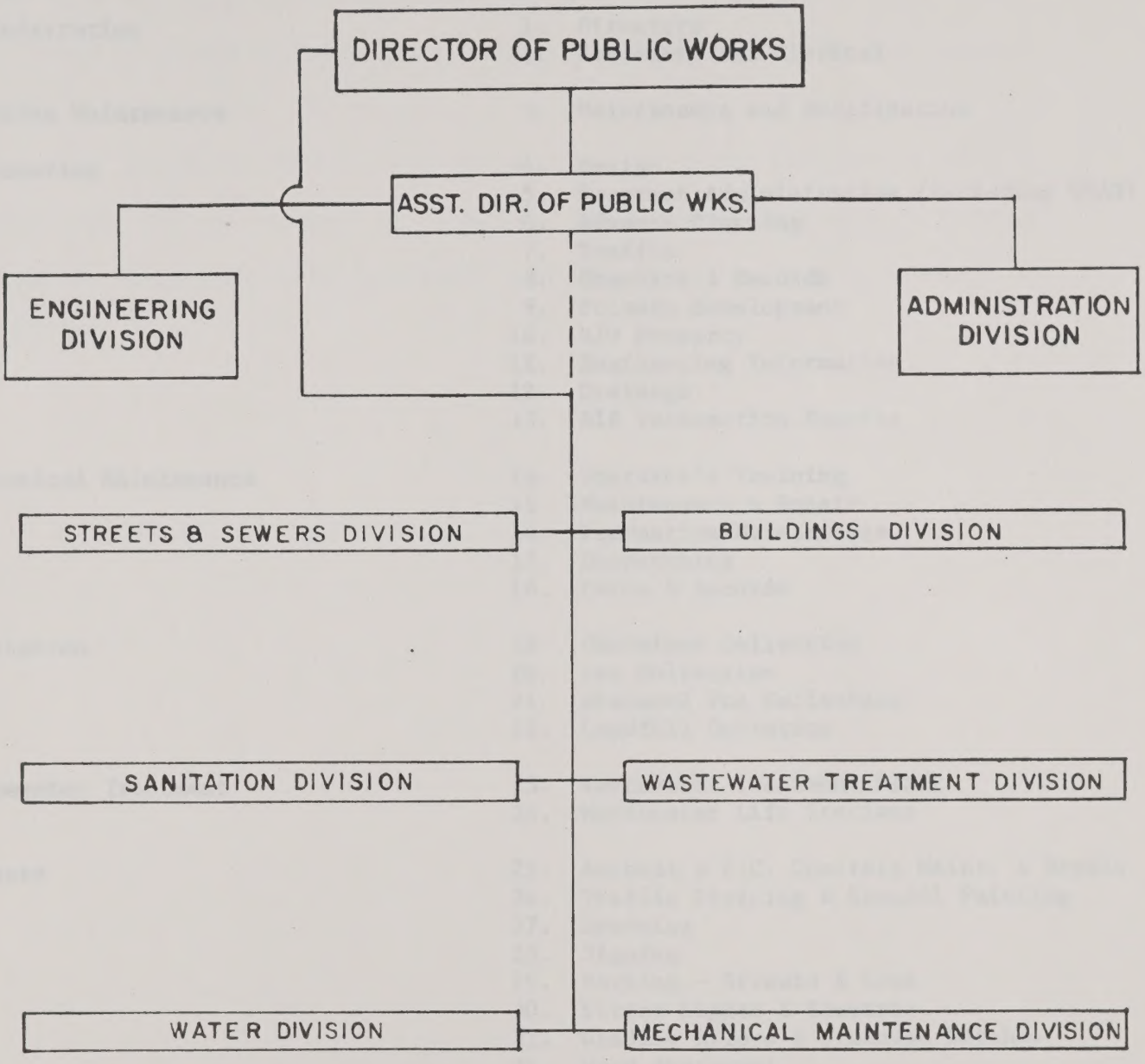
A Ø183
1982/1983

TABLE OF CONTENTS

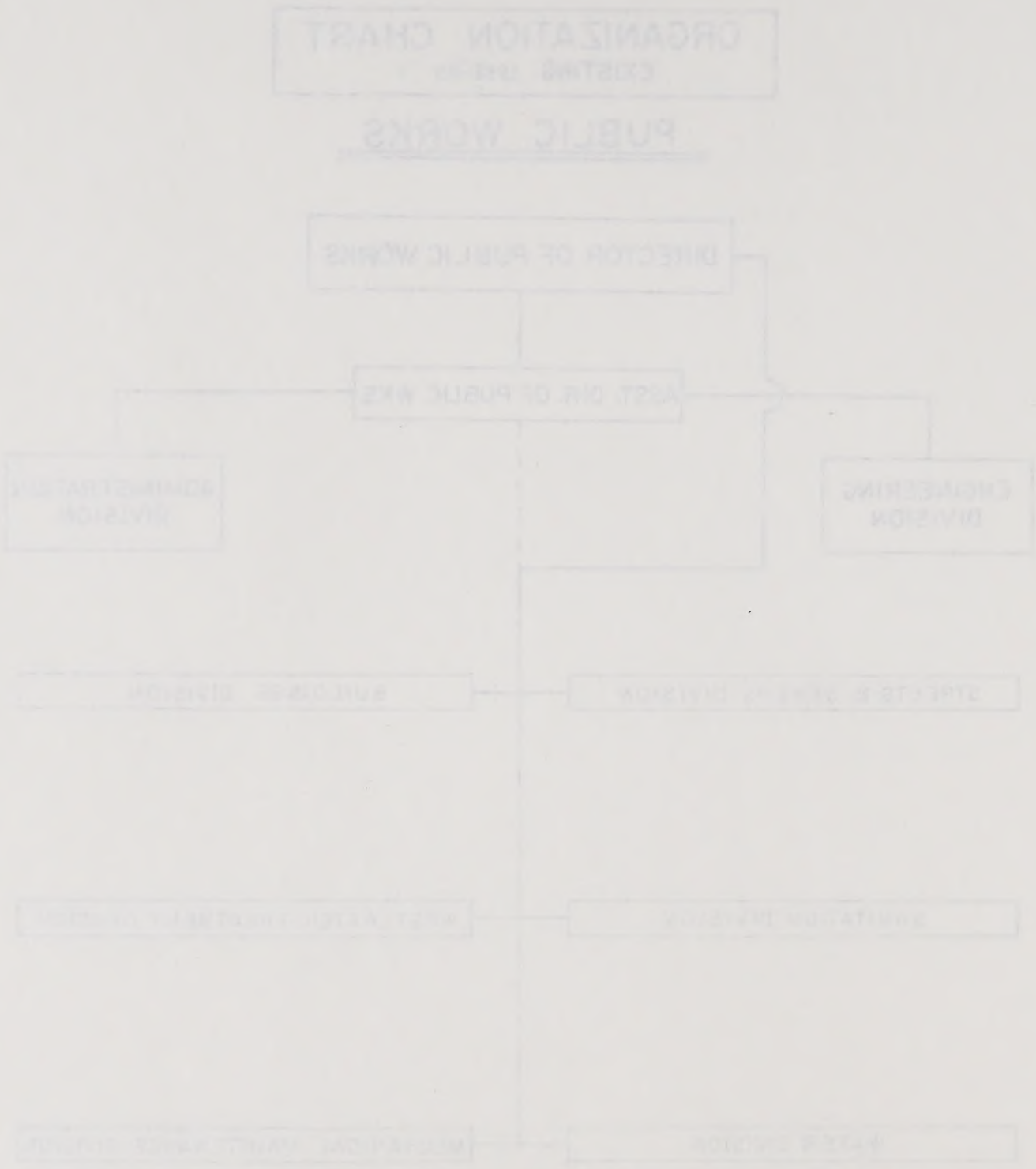
	Page No.
Public Works Department Organization Chart	1
- Administration	3
- Buildings	5
- Engineering	8
- Mechanical Maintenance	14
- Sanitation	18
- Street Division	24
- Wastewater Treatment Plant	31
- Water	41
Engineering, Operation and Administration Studies	47
Finances	49
Personnel Notes	50
Employee Roster	51

ORGANIZATION CHART
EXISTING 1982-83

PUBLIC WORKS



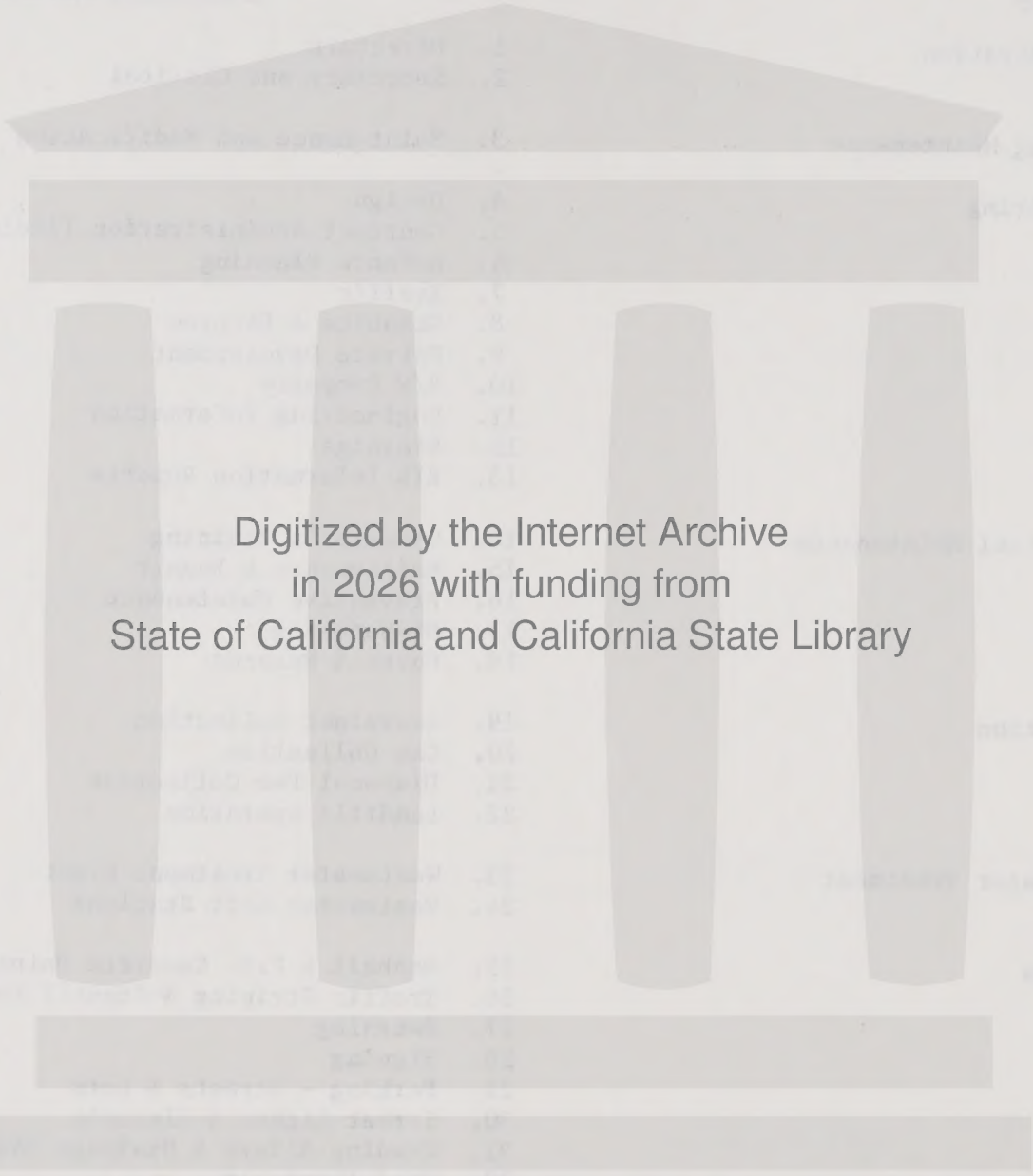
REV 2/81 MK



DIVISION ACTIVITIES

The thirty-six (36) functional activities of the department are assigned to one of eight divisions. Highlights of the past year regarding each of these divisions are summarized in this report.

Division	Functional Activities
Administration	1. Directors 2. Secretary and Clerical
Building Maintenance	3. Maintenance and Modification
Engineering	4. Design 5. Contract Administration (including SMAT) 6. Advance Planning 7. Traffic 8. Graphics & Records 9. Private Development 10. R/W Property 11. Engineering Information 12. Drainage 13. EIR Information Reports
Mechanical Maintenance	14. Operator's Training 15. Maintenance & Repair 16. Preventive Maintenance 17. Dispatching 18. Parts & Records
Sanitation	19. Container Collection 20. Can Collection 21. Disposal Fee Collection 22. Landfill Operation
Wastewater Treatment	23. Wastewater Treatment Plant 24. Wastewater Lift Stations
Streets	25. Asphalt & P.C. Concrete Maint. & Repair 26. Traffic Striping & Stencil Painting 27. Sweeping 28. Signing 29. Parking - Streets & Lots 30. Street Lights & Electric 31. Grading Alleys & Drainage Ditches 32. Weed Abatement 33. Maintain Sewer Lines 34. Stowell & Santa Maria Town Centers
Water	35. Production 36. Distribution



Digitized by the Internet Archive
in 2026 with funding from
State of California and California State Library

https://archive.org/details/igsl_annual-report-santa-maria-pw_1983

ADMINISTRATION

This division is responsible for administrative and clerical support of all activities of the Public Works Department, including coordination of program planning, budget preparation and control, personnel, supervisory training, administrative reports, maintenance of engineering records and investigation of complaints.

Total amount collected for both concrete and excavation permits for fiscal year 1982-83 amounted to $3,588.20. Total street encroachment permits issued by the Public Works Department were 101, of which 1 was void and 8 were no charge.

ADMINISTRATION DIVISION

CITY OF SANTA MARIA

DEPARTMENT OF PUBLIC WORKS

ORGANIZATION CHART

EXISTING 1982-83

DIRECTOR OF PUBLIC WORKS (1)

REESE RIDDIOUGH

ASSISTANT DIRECTOR (1)

JEFF SINN

SECRETARIAL AND CLERICAL SERVICES

SECRETARY II (1)

KATHY ALBRIGHT

STENO CLERK II (1)

WENDY HOLLING

CLERK TYPIST I *

* PART TIME

BUILDING MAINTENANCE DIVISION

The Building Maintenance Division has the responsibility for maintenance and modification of Public Works Center, City Hall, Library, Police Department, the Broadway and McClelland modulars, and an advisory responsibility for modifications on Recreation & Parks Department and Fire Department units. These tasks involve all functions connected in the modification and maintenance of all City buildings within the realm of skills and capabilities of this division.

The following is a breakdown of general services involving costs and man hours consumed:

Materials & Contract Services

	Amount	%
Contract Services	$ 21,097	40.8
New Work Materials	7,606	14.7
Maintenance Materials	23,032	44.5
	$ 51,735	100.0

Work Type Assignments

	Manhours	%
Janitorial	9,375	54.7
New Work	2,370	13.8
Skilled Maintenance	5,366	31.5
	17,111	100.0

Highlights of work assignments for fiscal year 1982-83 were as follows:

1. Completion of Naval Reserve Building which accounts for 30% of shop man hours as well as materials and contract service.

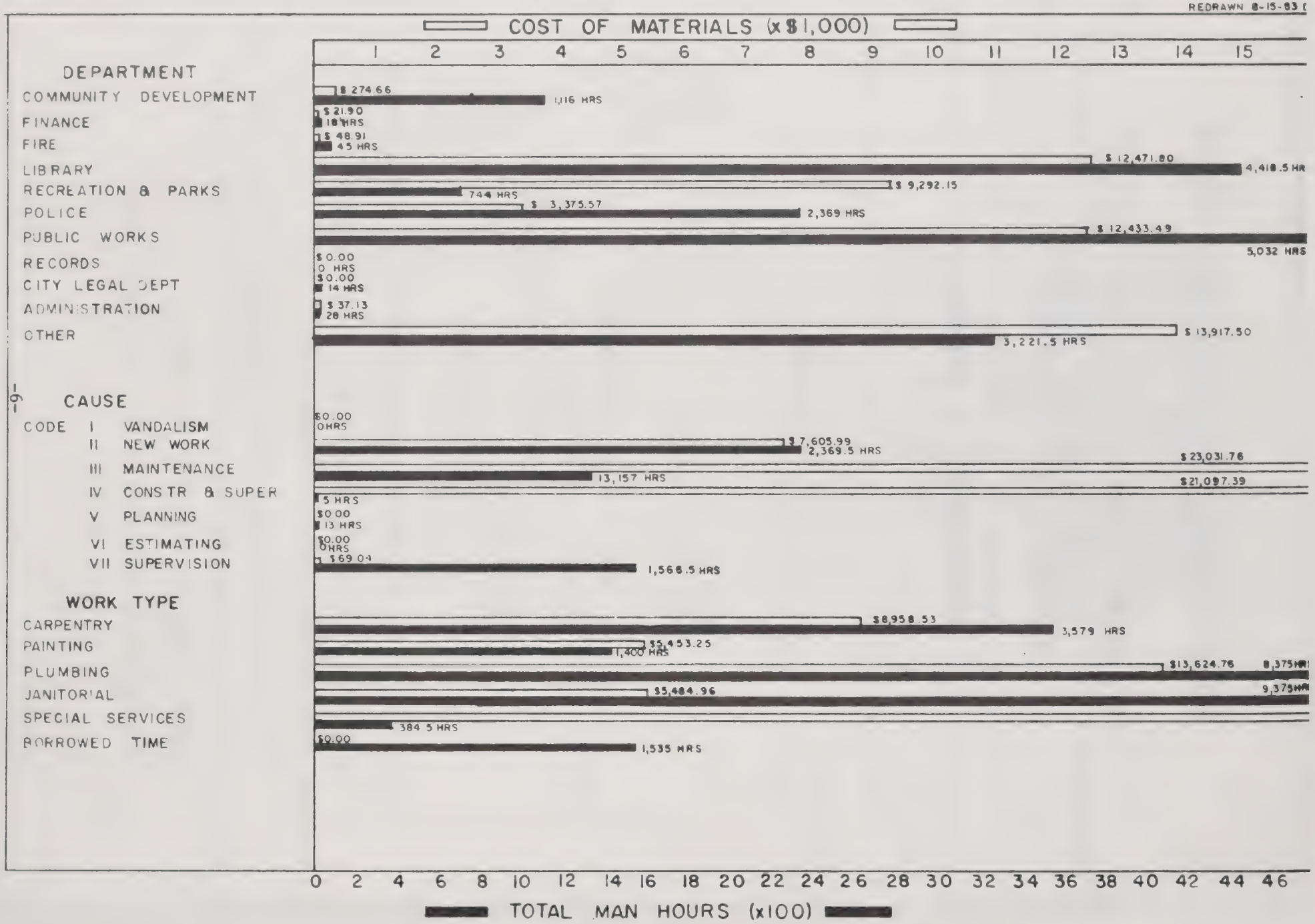
2. Renovation of Recreation & Parks Administration office has begun with contract of forced heating system and preparation of exterior for painting.

3. Library - painting of exterior and interior.

4. Public Works Administration office - painting of exterior.

BUILDING MAINTENANCE ACTIVITY REPORT

1982-1983



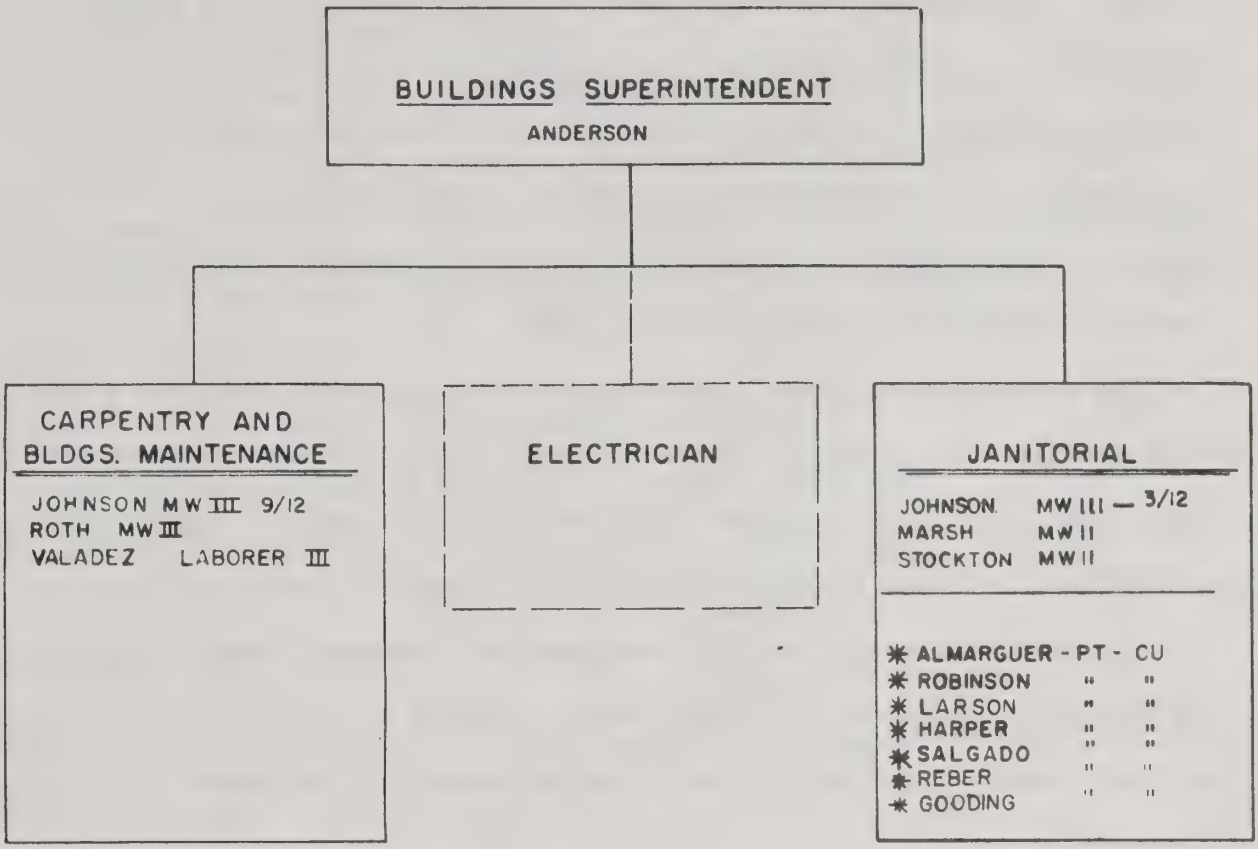
BUILDINGS DIVISION

CITY OF SANTA MARIA

DEPARTMENT OF PUBLIC WORKS

ORGANIZATION CHART

(EXISTING)



* FULL PART TIME

REV 8/83 DR
REV. 3/81 MK

A-230

ENGINEERING DIVISION

The major construction projects for the past fiscal year included the replacement of the roof on the 6 million gallon water reservoir, installation of an 18" water transmission main in Suey Road from Jones to Donovan, and the surface improvements to Camino Colegio between Broadway and Miller and Fesler from Miller to East. In addition, traffic signals were installed at Camino Colegio and Miller and modified at Cook and Miller, and parking lots #3 and #4 were completed in the westside revitalization area. There were also other miscellaneous water line replacement and street improvement projects as well as the annual street maintenance project. Construction began on the $1.5 million Mussell Senior Citizens Center with completion scheduled toward the end of 1983.

The wastewater treatment plant was in full operation with only a few items still remaining to complete. The contractor, Carl W. Olson, submitted a $1 million claim against the City and later filed suit for $1.3 million. The City has retained an Engineering Claims Consultant and Special Counsel to assist in the City's defense.

Private development activity continued at a moderate level throughout most of the year with a noticeable increase toward the end of the year due to favorable interest rates. There was no change in the personnel complement for the division (Plate I).

The traffic safety study of North Broadway was continued during the fiscal year in order to gain more support from the property owners. Assistance was also provided for major traffic studies that included Carlotti/North Broadway study, the Marian Medical Center area study, and the Santa Maria Airport traffic and circulation study. Assistance was also continued to Santa Maria Area Transit in planning route changes, operation, input from short range transit plan and the application for Federal funding. An application was made to the California Energy Commission for improving the timing of signals at 25 intersections in the City. The grant was approved by the State and a consultant was contracted to do the work.

It is anticipated that the project will be completed in December of 1983 and follow-up work will be done by the City and State staffs.

Plate 2 shows the major activities of this division, plus their respective approximate costs as a percentage of the total division salaries. Total includes regular salaries, overtime and part time salaries. This total was $272,572.50 for the fiscal year 1982-83.

Total authorized budget for this division for 1982-84 was $853,590. During 1982-83, the first year of this recently instituted two year budget, the amount expended or encumbered was $376,408 or approximately 44% of the funds authorized.

Private development and subdivision activity, shown on Plate 2, include the following:

1.	Building site reports for the permit application.		92
2.	Subdivision reports for Subdivision Committee meetings.		32
3.	Subdivisions recorded: 14; New Lots:	Residential:	171
		Commercial:	13
		Industrial:	27

Traffic Engineering and Traffic Committee activity shown on Plate 2 include the following:

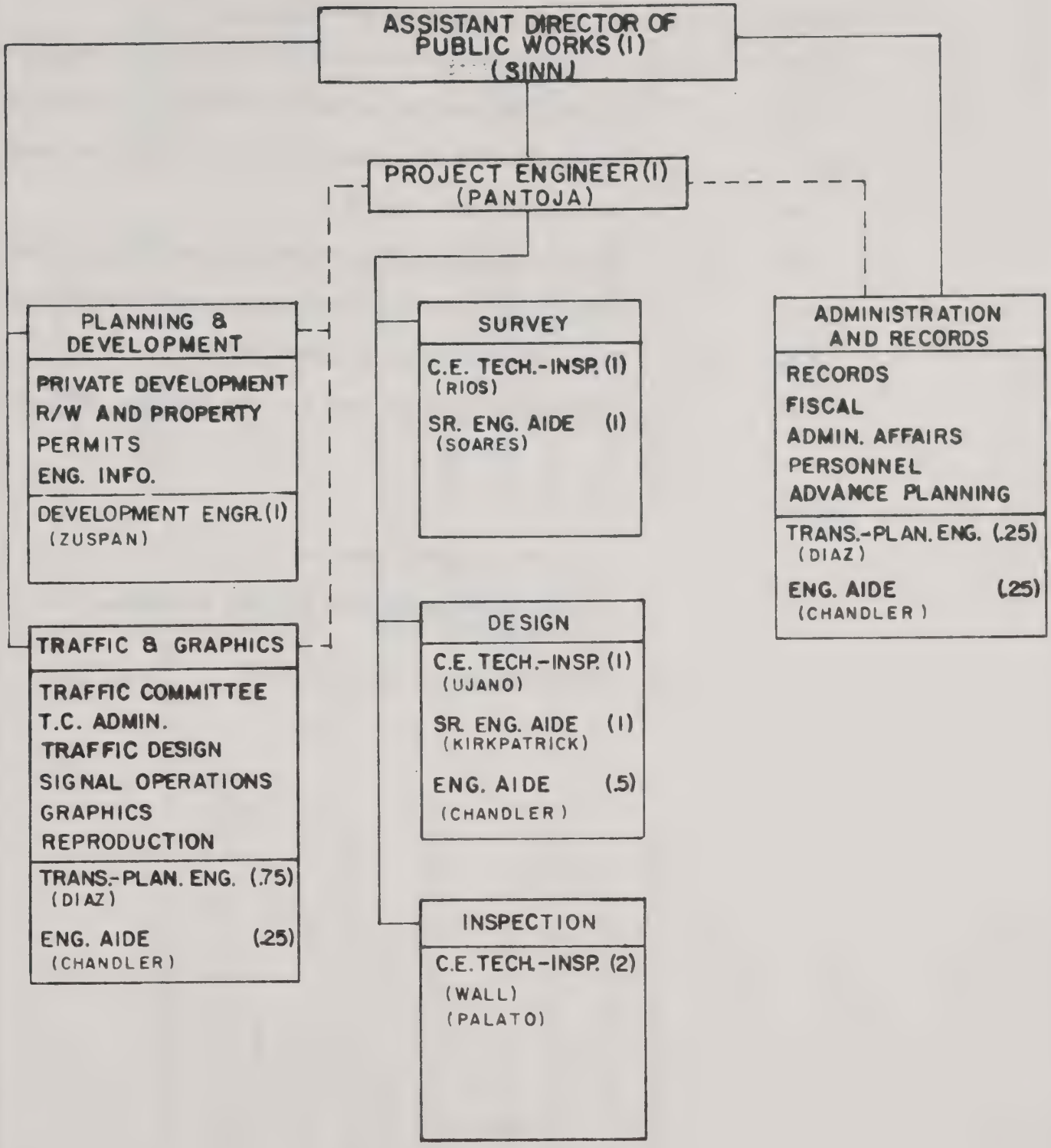
1.	Curb zone and parking investigation	22
2.	Speed zone studies	1
3.	Truck complaints	1
4.	Intersection studies	2
5.	Traffic signal studies	1
6.	Misc. traffic controls	27
7.	Traffic studies and reports	6
8.	Annual traffic count summary	
9.	Studies:	
	A. North Broadway, Fesler to Donovan	

Current engineering projects, shown on Plate 3, include any project accepted as complete by the City Council during the past year. These projects, prior to construction phase, had a set of plans and specifications prepared or reviewed by this division. Facts included on Plate 3 are the final contract amount, dates of Council award and final acceptance, and the percentage of engineering cost for the entire project based on the final contract price.

As recorded by this office, rainfall for the 1982-83 season was 20.79 inches which is above the average of 13.66 inches for the City.

ORGANIZATION CHART
EXISTING 1982-83

ENGINEERING DIVISION



ENGINEERING DIVISION

Fiscal Year Salary Expenditure (1982-83)

Percentage*	Activity Classification
24.25	Private Development, Subdivisions, Public Inquiries
25.96	Current Engineering projects; design and construction
21.07	Non-productive (meetings, holidays, vacation, sick leave)
5.64	Information and records
1.80	Advance planning, annexations, engineering studies
8.62	Support services (for City departments & divisions)
8.62	Traffic/transportation, SMAT, SCOTS
4.04	Administrative services, gas tax reports, 5870 proceedings
100.00%	

* Percent of total salaries

Total salaries include regular salaries, over time and part time

1982-83 total: $272,572.50

PLATE 2

ENGINEERING DIVISION
PLATE 3
FISCAL YEAR ENGINEERING PROJECTS

(Project Construction Started and/or Completed;
7/1/82 to 6/30/83)

Bid No.	Project Description	Final Cont. Cost	Council Award	Council Acceptance	Percent Eng. Cost/Project	Contractor
81/3	Wastewater Treatment & Disposal Facilities, 1980 Percolation Ponds & Irrigation System	$1,108,765.98	12/16/80	09/07/82	0.70%	A.J. Diani Const. Co.
82/8	Water Line Project - 1981	$ 580,088.91	04/20/82	10/05/82	3.38%	Jamieson Const. Co.
82/9	Parking Lots No. 3 & 4 Westside Revitalization Project	$ 196,716.22	04/20/82	12/07/82	4.24%	Tri-Valley Const. Co.
82/10	Rehabilitation of 6 M.G. Reservoir Roof	$ 165,173.93	06/01/82	11/16/82	0.84%	Kies Construction Co.
83/1	Street Maintenance 1982	$ 301,128.10	08/17/82	11/16/82	0.23%	M.J. Hermreck, Inc.
83/3	Street Improvement Project 1982	$ 208,124.96	09/07/82	03/15/83	7.57%	A.J. Diani Const. Co.
83/4	Traffic Signal Project 1982	$ 60,311.00	09/21/82	07/19/83	0.51%	Lee Wilson Electric C
83/6	Chemical Weed Abatement 1982-83	$ 17,705.59	01/04/83	04/05/83	0.15%	Frank J. Olocco

MECHANICAL MAINTENANCE DIVISION

This division is responsible for the management of the City's entire fleet of vehicles and other similar equipment. The mobile and stationary fleet has approximately 235 pieces of gasoline and diesel powered equipment of various sizes and types. The major portion consists of passenger vehicles and trucks, the remainder includes miscellaneous power equipment from lawn edgers to a Caterpillar D-8 bulldozer.

The maintenance program includes "in-house" minor and major engine repairs, tune-ups, general repairs, metal fabrication, minor body repairs, brake repairs, tire repairs, lubrication, and an effective preventive maintenance program. An analysis is performed on each job to assure best over-all economy and safety. This has resulted in operating the division with a minimum dollar budget. This division is unique in that it operates as a "pool" rental system for all the mechanical equipment used by all the departments and divisions and entails the development of the specifications for purchasing of same; keeps detailed records for equipment cost analysis and setting of the rental rates for vehicles as well as the City radio communication units.

During the fiscal year, fleet vehicles traveled 1,449,427 miles, an increase of 11.9% from last year, using some 231,355 gallons of fuel, an increase of 9.8% from last year. Service fuel delivery tickets used during this period were 16,367.

The division used 2,417 shop repair orders. This is an increase of 332 over that used last year.

The division used approximately 15.0 man-hours to assist the other City departments on specialized projects such as fabrication and welding. The cost of personnel, equipment, and material for this service is reimbursed through "Inter-departmental" billing.

A budget balance is sustained through revenue from the Pool Rental Program and other reimbursements, as follows:

a)	Assigned and unassigned vehicles	$1,624,050
b)	Private party accident insurance	550
c)	Sale of surplus vehicles and equipment	20,000
d)	State of California gasoline road tax rebate	1,000
e)	Services provided to other agencies	12,000
		$1,657,600

All City departments operating mobile equipment have contributed to the increase in miles traveled during 1982-83 fiscal year. Police patrol and Santa Maria Area Transit (SMAT) accounted for the greatest increase. Police patrol operated fourteen (14) black and white units for the full fiscal year. Previously seven (7) units were used, and each unit averaged 2,450 miles per month. Durfng the last fiscal year all patrol units averaged 2,550 miles a month.

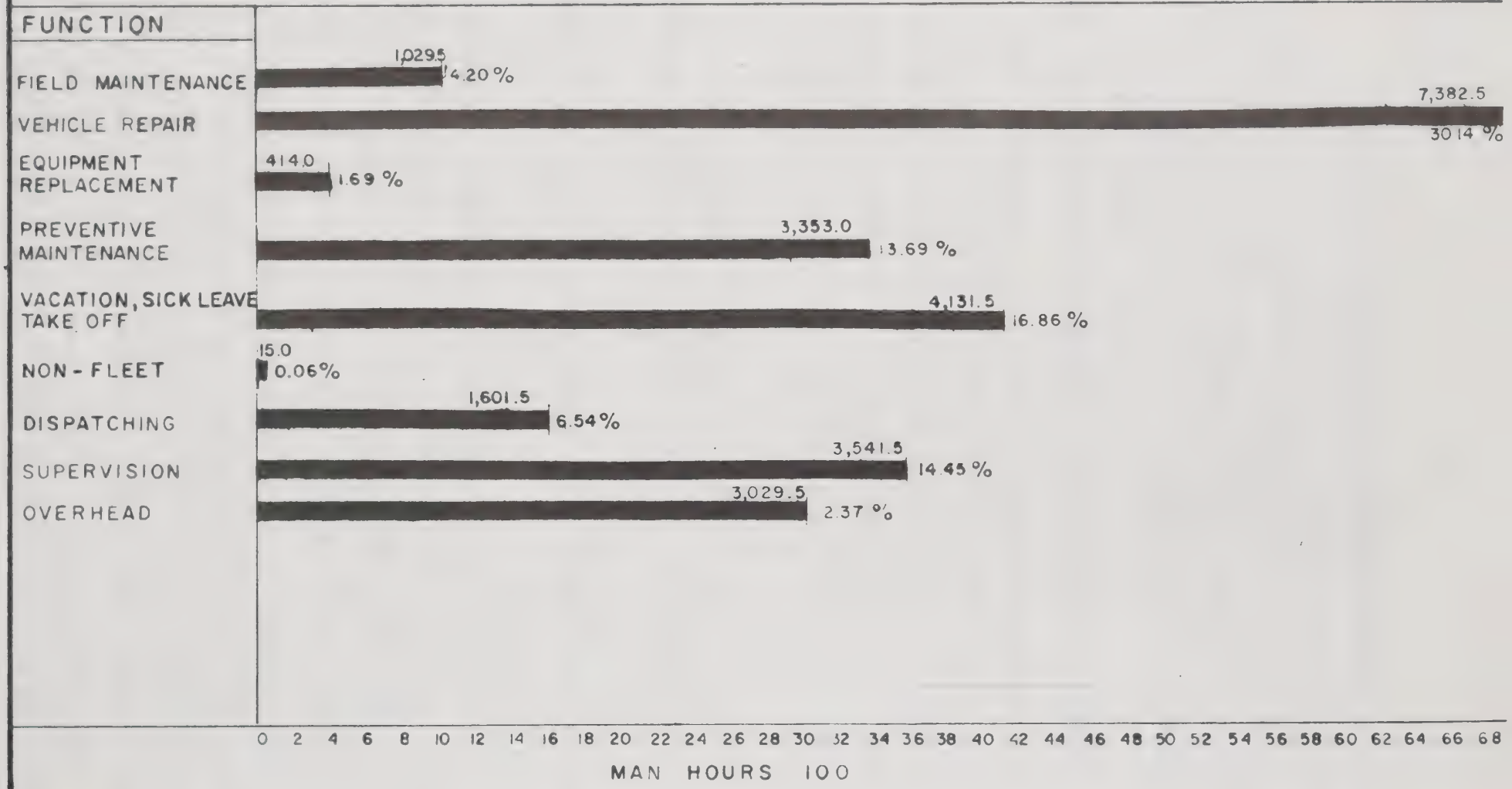
SMAT added Saturday service as well as increasing each fixed route by one (1) mile; this accounted for an additional 24,775 miles for the combined bus fleet.

The Fire Department reported a 5% increase in emergency and public service calls over the previous year.

Sanitation division saw a 13% increase of refuse intake at the City's landfill which in turn increased landfill equipment operating hours by 1,400 hours over the previous twelve (12) month period. It is recommended that in the near future some thought be given to the procurement of additional landfill equipment to share the work load of the caterpiller D-8 bulldozer and to serve as a back-up when this unit is out of service for maintenance and/or repairs.

Petroleum officials remind us that fuel supply shortages, although presently infrequent, will continue in the future. Therefore, this division will continue to seek fuel saving methods, i.e. down size replacements where possible; encourage fuel saving drivers' techniques (CAM 81-1); and investigate alternative fuels.

MECHANICAL MAINTENANCE
MAN HOUR CHART 1982-83



TOTAL MAN HOURS

24,498

REV. 8-19-83 DLR

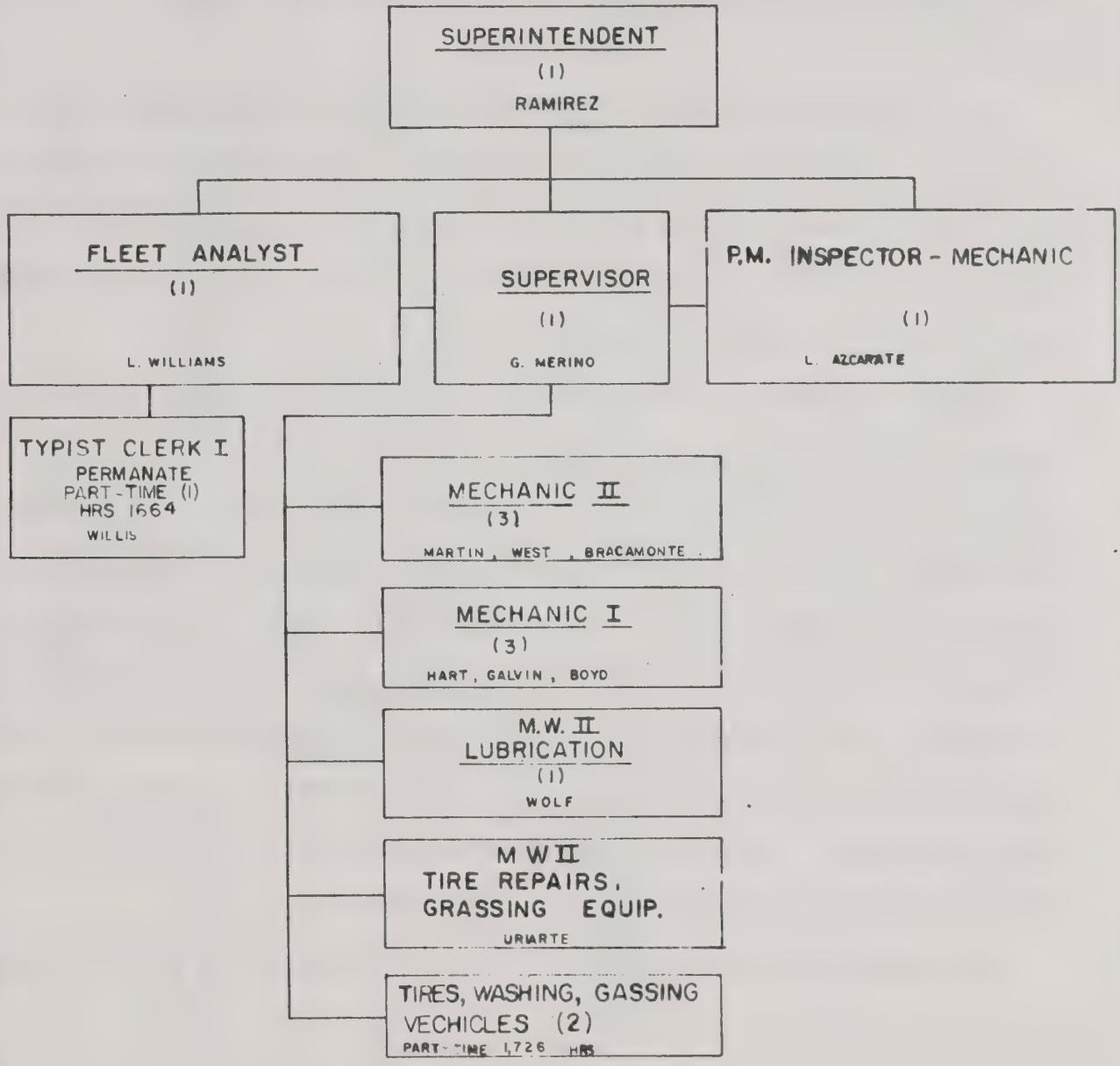
MECHANICAL MAINTENANCE DIVISION

CITY OF SANTA MARIA

DEPARTMENT OF PUBLIC WORKS

ORGANIZATION CHART

(EXISTING)



REV: 8-19-83

A-241

SANITATION DIVISION

Collection

The collection section of the Sanitation Division is responsible for the collection of mixed refuse from approximately 10,588 residential and commercial accounts using City personnel and equipment. Residential refuse is collected twice each week and the commercial accounts are serviced from one to six times each week.

The collections are made by two residential rear loading crews and four side loader crews and the commercial accounts are picked up by three front loader drivers. Residents are still bundling and putting out for collection old newspapers. As of June 30, 1983, 312.39 tons have been collected by City crews since the program was initiated on February 1, 1974.

Shown in Figure "I" is a comparison of the number of miles traveled by all Sanitation Division trucks for each of the last ten years for the month of June of each year. The 1981 reduction in residential miles traveled is a result of districting of the City for collection purposes along with the balancing of all the collection routes, which was implemented June 2, 1980. The drop off in miles traveled in 1974 can be attributed to the energy shortage and a resultant change in operation. The increase in 1975 is caused by new construction and when the new scales were available early in 1975 the Highway Patrol pointed out, in the form of a warning, that some of our trucks were overloaded. As a result more trips were made to the landfill with lighter loads.

The increase in miles traveled is due to the increase in service accounts.

FIGURE I

NUMBER OF MILES TRAVELED

	Residential	Commercial	Total
June 1973	3,718	2,390	6,108
1974	3,329	2,237	5,566
1975	3,566	2,415	5,981
1976	3,324	2,710	6,034
1977	3,444	2,492	5,936
1978	3,865	2,711	6,576
1979	3,429	2,699	6,128
1980	3,621	2,699	6,320
1981	3,124	2,758	5,882
1982	3,523	2,788	6,311
1983	3,789	2,925	6,714

Figure "II" and "III" are the tabulations showing the number of accounts for the residential and commercial over the past ten years. A point to be noted is the 1979 account figures were taken from the number of water meters in the City which included accounts serviced by Health Sanitation Service. The 1980 accounts are actual per computer print out.

NUMBER OF RESIDENTIAL ACCOUNTS

June 1973	8,843
1974	8,923
1975	9,025
1976	9,320
1977	9,470
1978	9,961
1979	10,220
1980	9,251
1981	9,553
1982	9,778
1983	9,980

FIGURE "II"

NUMBER OF COMMERCIAL ACCOUNTS

June 1973	329
1974	358
1975	376
1976	427
1977	452
1978	482
1979	506
1980	535
1981	546
1982	515
1983	608

FIGURE "III"

Figure "IV" shows the total cubic yards hauled by front loaders over the past 10 year period for the month of June of each year. The increase and decreases noted below are due in part to the fluctuations in the cardboard market.

NUMBER OF CUBIC YARDS HAULED BY FRONT LOADERS (COMMERCIAL)

June 1973	13,261
1974	13,106
1975	14,536
1976	14,501
1977	16,959
1978	17,108
1979	18,708
1980	18,953
1981	18,332
1982	18,564
1983	19,180

FIGURE "IV"

Figure "V" shows the total tons hauled for the past four years for the month of June of each year.

NUMBER OF TONS HAULED

	Residential	Commercial
June 1980	1,074	985
1981	1,214	1,067
1982	1,285.24	1,075.76
1983	1,361.11	1,147.19

FIGURE "V"

Capital improvements added this year consists of 50 new refuse bins purchased for new accounts.

Disposal:

The disposal section of the Sanitation Division is responsible for operation of the City Landfill along the easterly terminus of East Main Street. This involves the spreading, compacting and covering of all refuse produced in the City, as well as all produced by residents adjacent to the City in San Luis Obispo and Santa Barbara Counties. This also includes estimating small pickup loads and collecting cash or issuing charge tickets for all loads dumping at the landfill. Some of the associated activities, are comprised of constructing and maintaining the access road and erecting fences for the control of blowing paper.

Increases in dumping fees were instituted during the fiscal year; i.e. July 1982 - 15% and January 1983 - 10%.

The only capital improvement in 1982-83 was a chain link fence extension of 500' along Main Street and 620', 4-strand barbed wire fence along the levee road.

Figure "VI" shows the acreage used through the fiscal years from 1965-66 to 1982-83. The variation from a normal increase each year starting in 1968-69 to present, is caused by the different types of land being used (reuse of the old dump versus clean land). The reduction in land used in 75-76, 76-77 and 81-82 & 83 was caused by raising the height of the finished fill higher than in previous years, in addition to the clean land now being used. Increased land useage generally is the result of not going above the levee height to make a contoured hill and increased use of the landfill by the public. In March of 1983, 84 additional acres were purchased adjacent to existing facility.

Approximately 245.20 acres of clean land is remaining for the existing landfill operation as of June 30, 1983.

Figure "VII" indicates the total number of tons received at the landfill for the various calendar years since operation of the scales commenced. These figures are reported on a quarterly basis to the Regional Water Control Board in compliance with Order No. 72-74 adopted October 12, 1972.

ACRES USED PER YEAR (F.Y.)

1965-66	3.76
1966-67	4.10
1967-68	5.53
1968-69	7.45
1969-70	5.00
1970-71	6.81
1971-72	8.20
1972-73	5.83
1973-74	6.70
1974-75	6.05
1975-76	4.96
1976-77	4.65
1977-78	5.37
1978-79	6.69
1979-80	9.89
1980-81	10.34
1981-82	6.67
1982-83	2.75

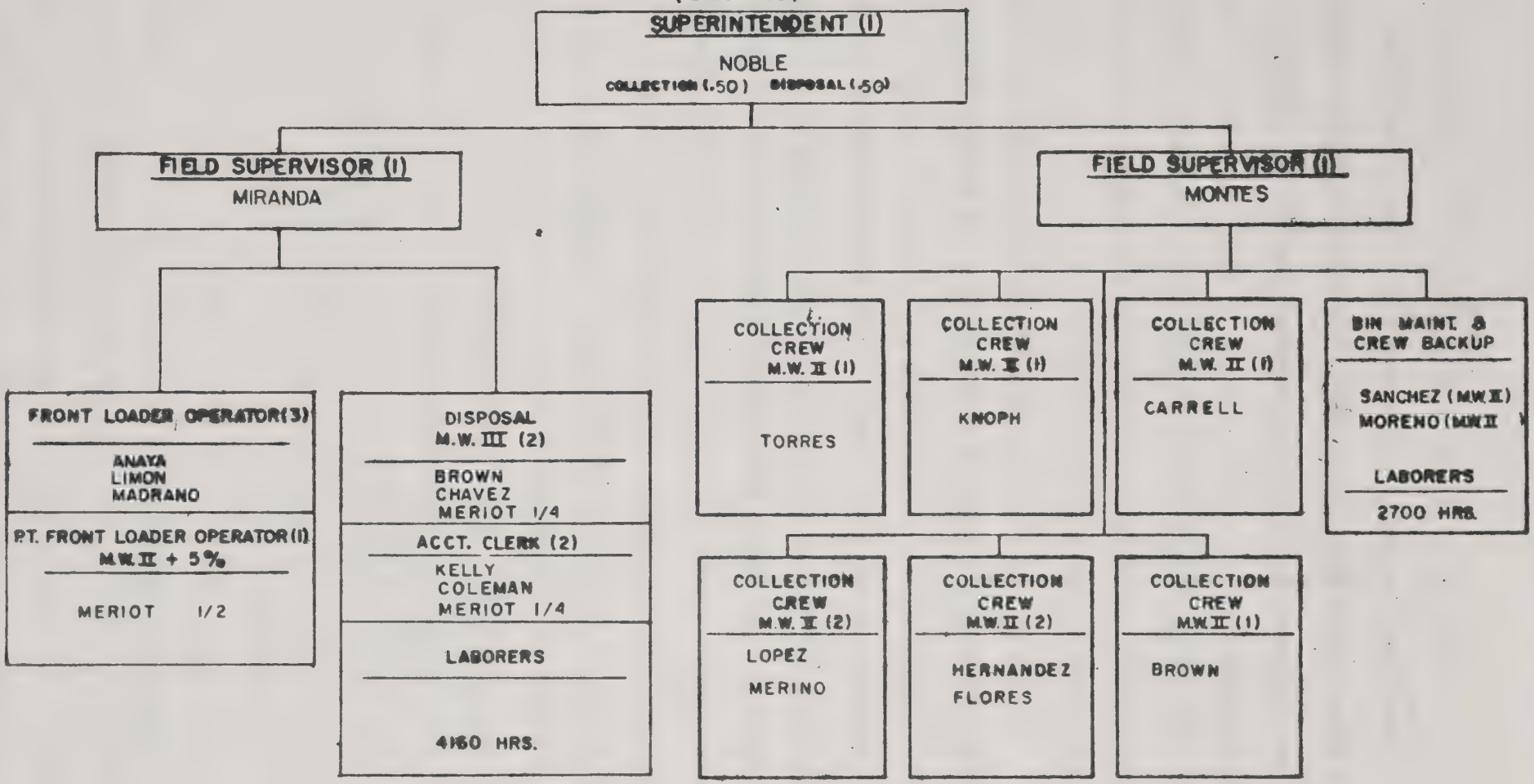
FIGURE "VI"

Calendar Year	Tons
1977	68,519
1978	83,367
1979	85,800
1980	78,414
1981	98,224
1982	119,766.97

FIGURE "VII"

SANITATION DIVISION
CITY OF SANTA MARIA
DEPARTMENT OF PUBLIC WORKS
ORGANIZATION CHART

(EXISTING)



1/20/81 MK A-240

STREET DIVISION

The Street Division is responsible for preventative and regular maintenance of the City streets with appurtenant facilities. This includes emergency maintenance or repair caused by accidents, weather conditions, settlement, or other unusual unexpected damage.

The Street Division is composed of 13 maintenance workers, 1 laborer III, 2 electricians, 1 electrical supervisor, 1 street and sewer maintenance supervisor and 1 street and sewer superintendent.

The degree and type of maintenance for each street or portion thereof in the total City street system is determined by the Street Superintendent taking into consideration traffic requirements and monies available.

High on the priority list is proper scheduling and planning of routine preventative maintenance procedures in order that any inconvenience to the public is kept to a minimum. Every effort is made to speedily correct hazardous conditions, which interfere with the flow of traffic, vehicular or pedestrian. Safety for the public is our number one consideration. The major maintenance activities conducted by the Street Division are as follows:

1. Travel-Way Maintenance
    a. A/C Repair - Overlays - Chip Sealcoat
    b. Sweeping
    c. Concrete Improvement Repair
    d. Traffic Control
    e. Traffic Delineation
    f. Street Illumination and Electrical Maintenance
2. Wastewater Collection System Maintenance
3. Drainage Maintenance
4. Weed Abatement

1. TRAVELWAY MAINTENANCE

a. The preservation, upkeep and restoration of 146 miles of flexible pavement is the maintenance responsibility of this division. Travelway maintenance program during fiscal year 1982-83 consisted of placing 973 tons of either SC/800

or 85/100 asphaltic concrete on City streets in need of repair. This activity involves the repair of pot holes, water ditches, sewer ditches and renovation of portions of streets in preparation for annual overlays and sealcoat program.

The annual major street maintenance program consisted of placing 6,916 tons of A/C on 913,654 sq. ft. of streets for a cost of $187,704 and placing 1,729/261 tons of chip/oil binder on 1,806,743 sq. ft. of streets for a cost of $93,564; sealcoat of City Hall parking lot 15,300 sq. ft. for a cost of $2,142 and adjustment replacement of survey monuments, lampholes, valve boxes and manholes for a cost of $14,760. The total program cost = $298,170.

b. Street Sweeping: City streets were swept on a weekly schedule with the business area on a daily basis. The 2 motorized sweepers were operational approximately 397 sweeper days out of 520 sweeper days. The 123 days the sweepers were not operating were due to service repair, operator's illness, inclement weather, holidays and comp time off. The two sweepers removed and hauled to the landfill 2,044 tons of material swept off the City streets; using 12 pickup brooms and 39 gutter brooms.

c. Concrete Improvement Maintenance: In past fiscal years, this activity was curtailed and only temporary repairs were accomplished on defective concrete improvements. During fiscal year 1982-83 two additional people were hired and there is now a 3 man crew used continuously to repair damaged sidewalk and 135 work orders were completed for a total of 12,586 sq. ft. Temporary repair of hazardous sidewalk complaints continues and are made within a very short period of time, and in most cases the same day, time providing. Presently, this division has approximately 304 known locations of tree root damaged concrete improvements.

d. Traffic Control: This program includes all work performed in signing as a traffic control device and placed on City streets for the purpose of warning, regulating or guiding traffic. The work may consist of the manufacture, purchasing, assembly and installation of new signs; replacement of existing damaged signs and the repair, cleaning and painting of signs. Signs are replaced or

repaired when they become defective due to age, weathering, vandalism, accidents or any other types of wear and tear. Following is a summary of this activity:

Type Signs	New or Reinstall Damaged	Reface Sign, Plate & Reinstall
Regulatory	172	200
Guide	159	53
Warning	54	73
Neighborhood Watch	79	

Also, 123 barricades were constructed and 35 repaired for use by division crews during their normal work activities.

e. Pavement Delineation: The pavement delineation program involved all work necessary to maintain and replace traffic directional street markings. Work included layout, removal of old stripes, painting of new or existing stripes and limited parking zones. This required the use of 1,519 gallons of traffic paint, 3 tons of beads, 140 gallons of lacquer and paint thinner.

f. Street Illumination & Electrical Maintenance: Street illumination is a major responsibility of this division and consists in the upkeep of 3,156 street lights and in addition includes electrical service as required by all departments and their subordinate divisions for new machines; either changes in electrical circuits or electrical repairs.

During this period there were 43 mercury vapor lights converted to low pressure sodium lights by this division. Total savings, without the sacrifice of illumination, was approximately $1,755. The conversion of street light illumination will continue until all the lights that can be converted are completed. Project completion year is 1983-84; including State Highways 101 & 166.

2. WASTEWATER COLLECTION SYSTEM

This activity consisted of immediate response to 135 main line sewer stoppage complaints. This is approximately 4% less than 1981-82.

There was 44,475 lin. ft. of preventive wastewater collection system scheduled maintenance. The only areas that received continuous preventive maintenance were known problem areas. There is a total of 115.7 miles of sewer line in the City's system.

3. DRAINAGE MAINTENANCE

There are 35,853 feet of underground drainage facilities now in existance and has effected a reduction of flooding at intersections on some of our major arterials and other streets. Since the system has been in existance relatively little maintenance has been necessary. However, in the future the maintenance of the underground drainage system will increase. The present cleaning operations include flushing of 110 intersection culverts, grading and weed control of 10 major drainage ditches; this work occurs twice annually with a 2 man crew and contract applications of chemical weed control at a cost of $582.20.

4. WEED ABATEMENT

The weed abatement program takes most of seven months to complete and is conducted in five phases:

I Mid-fiscal year for lot inspection
II Posting lots for chemical weed abatement
III Application of chemical weed control
IV Posting lots for weed abatement & debris removal, manually and/or with equipment
V Manual destruction of weeds and cleaning of lots. This phase will run into the following fiscal year.

All phases require the posting and compilation of cost records to assure proper billing for each lot; all of which is forwarded to the City Clerk for the filing of assessment against the property. The entire weed abatement program during fiscal year 1982-83 came to a total of 3,813,670 sq. ft. for a cost of $17,123.39.

5. STOWELL & SANTA MARIA TOWN CENTERS - PARKING LOTS W/LANDSCAPING

The Stowell and Santa Maria Town Centers landscaping and parking area maintenance is performed by private contractors under the administration of the Street Division. Review for compliance with bid specifications and administration of expenditures in accordance with the contracts are the primary responsibilities. Performance standards are determined by periodic inspections and notifying the contractor of any deficiencies. Two parking lots and the east

corridor of the Santa Maria Town Center were sealcoated; a total of 242,675 sq. ft. at a cost of $20,812.

The following graph depicts manhours required for various segments of the Street Division work; note the asterisk indicates the manhours used by the electrical crew only.

STREET DIVISION MANHOURS

ELECTRICAL ✳ — JULY 1, 1982 TO JUNE 30, 1983

TYPE OF MAINTENANCE ACTIVITY	HOURS	MAN HOURS UTILIZED PER OPERATION (THOUSAND HOURS) 0 1 2 3 4 5 6 7 8 9	% OF TOTAL
A.C.	4542		12.33
PAINTING	2055.5		5,58
SWEEPING	3464.5		9,41
SEWERS	882		2,39
DRAINAGE	1652		4,49
ALLEY	1321.5		3,59
CONCRETE	5249.5		14.25
SIGNS	1174		3.19
BARRICADES	90.5		0.25
ST. LIGHTS ✳	2480.5		6.73
CITY HALL ✳	179.5		0,49
REC. & PARKS ✳	568		1,54
FIRE ✳	168		0,46
POLICE ✳	37		0,10
MECH. ✳	20		0,05
WATER ✳	92		0,25
PLANNING ✳	68		0.18
W.W.T.P. ✳	188		0,51
LIBRARY ✳	84		0,23
BLDG. ✳	710		1.93
T.C.M. ✳	152		0.41
PARADES	38		0.10
N.W. SIGNS	17		0.05
INDUST. SICK	85.5		0.23
ABSENT SICK	539,5		1.46
OVERLAY/CHIP	1516		4.12
T.C.M.	857.5		2.32
ABSENT	28		0.08
WEED ABAT. 82/83	1412		3.83
OTHER DEPT.	—		—
ELECTRICAL	163		0.44
VACATION	1933		5.25
SICK LEAVE	2067		5.61
COMP TIME (-)	1130.5		3,07
F. HOLIDAY	876.5		2.38
HOLIDAY	704		1.91
MISC.	286		0.88
REG. HOURS	36,832		100
COMP. TIME (+)	644		0
P/T - NYC	2520		0
TOTAL MAN HOURS 39,996			

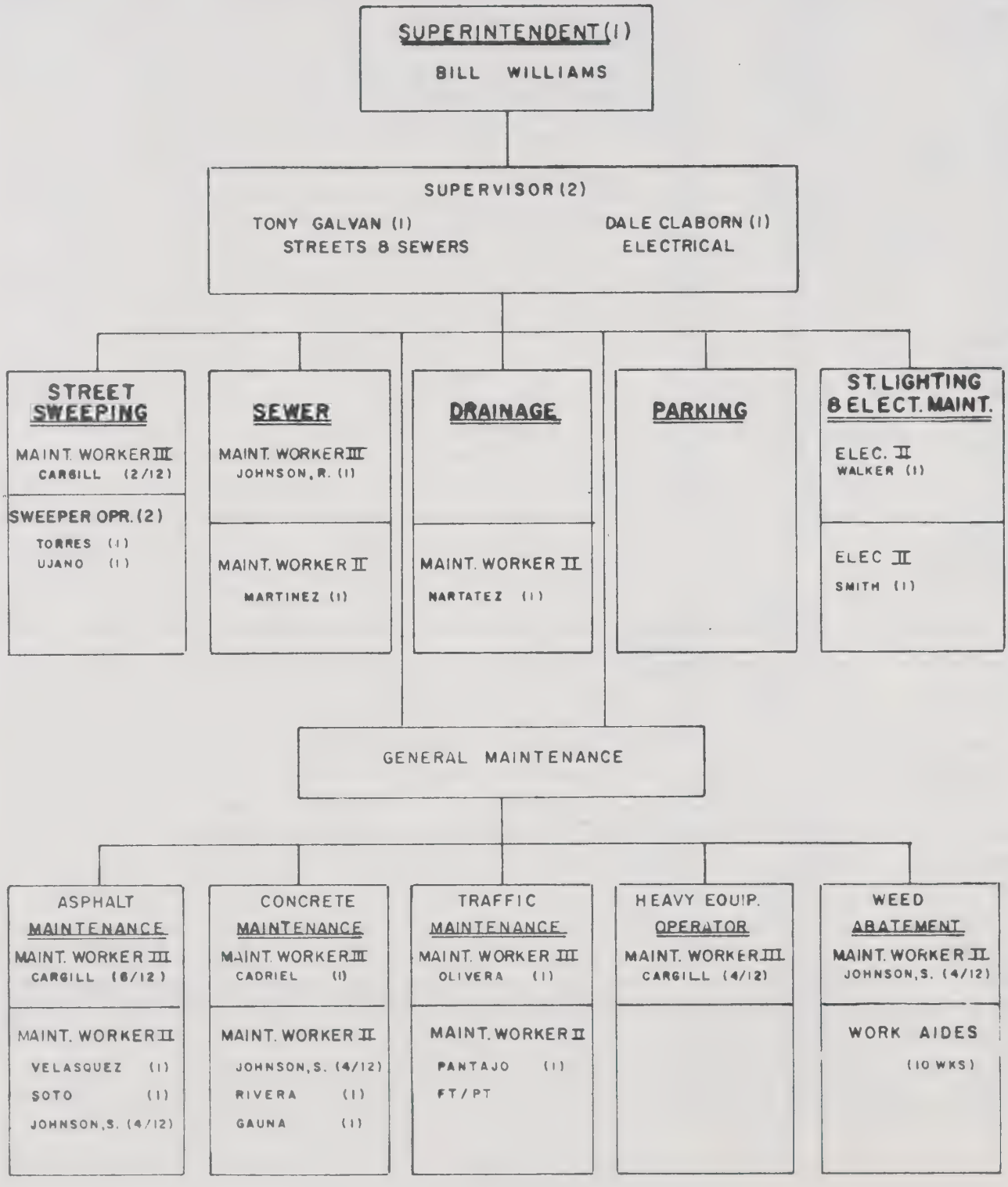
Rev. 7/83 TPC

STREET DIVISION

CITY OF SANTA MARIA
DEPARTMENT OF PUBLIC WORKS

ORGANIZATION CHART

(82 – 83)



REV. 8-82 7-83 P.C. A-226

WASTEWATER TREATMENT PLANT

The Wastewater Treatment Plant is located on Black Road approximately 2.5 miles west of Santa Maria. Its purpose is to treat all domestic and industrial waste collected and conveyed by sewer system at a reasonable cost. The City of Santa Maria has treated and disposed of wastewater at the present site off Black Road since 1910. The treatment plant is designed to serve a population of approximately 54,000. This includes capacity to treat over 2 MGD of flow from the City's industries. The capacity of 7.8 MGD should be sufficient until mid-1988. The treatment process removes 93% of the suspended solids (ss) and 90% of the biochemical oxygen demand (BOD) contained in the wastewater. The land disposal system removes an additional percentage of these pollutants and a portion of the nutrients normally found in wastewater including nitrogen and phosphorus. The plant effluent is suitable for irrigation of permanent non-dairy pasture land and fodder crops. Digested sludge averaged 57% volatile reduction. This sludge is dried in earthen beds and can be used as a soil conditioner in the absence of root crops.

The plant is maintained and operated by one Superintendent, one Plant Supervisor, one Laboratory Technician, one Source Control Inspector and five Operators. Except for one trainee, all operators are currently certified in compliance with State Bill AB1961. Also, the Laboratory Technician was certified this last year by the California Water Pollution Control Association (CWPCA).

Last year the City held an open house marking completion of the new wastewater treatment plant. Plant tours by students and other interested groups continued to be given on request. A total of 55 people toured the plant this fiscal year. Visitors are shown and told about the various components of wastewater treatment used at the plant. Generally the tours are concluded with a visit to the laboratory where a question and answer session is held.

The following tests were performed in the wastewater treatment plant laboratory:

Inf.	Eff.	
0	38	dissolved oxygen
19	52	biochemical oxygen demand
19	52	total non-filtrable residue
0	50	grease and oil
358	358	settleable solid
360	360	pH
0	360	electrical conductivity
	12	boron

Inf.	Eff.	
	5	chloride ion concentration
	4	total phosphorous
	4	sulfate ion concentration
	4	total kjeldahl
	3	nitrogen NO_3
51	51	sludge samples for percent solids
	52	sludge volatile acid & alkalinity
1	10	total filtrable residue
51	51	% volatile solids

Certain tests required by the State Water Quality Board were beyond the scope of the plant laboratory. For this reason, "Fruit Growers Laboratory" performed the tests under contract for the annual analysis (heavy metals, MBAS, phenols, polychlorinated byphenyls, and total chlorinated hydrocarbons), and a portion of the quarterly analysis (sodium). The results of the above tests do aid in plant operation, and in some cases, reflect plant efficiency or indicate where more source control is needed. In addition to the above, BOD and Total Non-Filtrable Residue tests were performed on industrial waste discharges to the sewer system as necessary for wastewater strength determinations and charges as required under the wastewater ordinance.

Industrial Source Control - 1982-83

Industrial Pretreatment Program - During the fiscal year of 1982-83, the Industrial Pretreatment Program and proposed Ordinance were passed, adopted, and put into effect. The Pretreatment Program was adopted on November 16, 1982 followed by the Ordinance on May 17, 1983. The delay in putting the Ordinance before the Council was due to proposed limitations on sodium, chloride, and total dissolved solids which would have drastic impact on the City's soft water regenerating industry. However, the limitations were deemed necessary by the Wastewater Treatment Plant engineers (John Carollo Engineers) to comply with the treatment plant's NPDES permit limitations set by the Regional Water Quality Control Board (RWQCB).

An independent study was conducted by the Wastewater Division to disclose the relationship between the discharged effluent from the soft water companies and salt impact on the Wastewater Treatment Plant. The soft water regenerating companies were also allowed representation with City officials to discuss the proposed limitations and any viable solutions. An additional study was undertaken to disclose other high salt discharging industries within the City. With the close of the fiscal year nearing, the sodium, chloride, and TDS limitations were shelved for future amendment to allow the passing of the Ordinance within the compliance schedule set by the Water Quality Control Board.

Permits - The following permits have been issued, extended or renewed during this fiscal year.

Permit No.	Business	Issue Date
08	Rayne of Santa Maria	11/09/82
16	Lingenfelder's Servisoft	03/27/83
32	Culligan	12/15/82
34	Bonita Packing Company	03/04/83
28	Pentachem Company	02/28/83
59	Bob's Big Boy	10/14/82
60	Gino's Restaurant	10/14/82
61	Wendy's Restaurant	12/07/82
62	Ramsey Laboratories, Inc.	10/28/82
63	Los Vineros Winery	09/01/82
64	Charlie's Restaurant	12/17/82
65	Bob Pyne Transmission	01/19/83
66	Coast Clutch and Brake	01/19/83
67	Brown's Motor Parts	01/19/83
68	McDonald's Restaurant (south)	02/16/83
69	Golden Donut	02/22/83
70	Harry Clason U-Rent	02/28/83
72	Mission Linen Supply	03/01/83
73	Drain Doctors Septic Pumping	03/15/83
74	Trico Industries	03/21/83
75	Roger's Septic Service	03/25/83
02	Action Car Wash	04/07/83
03	Utage Restaurant	04/12/83
76	Arrow Photo 1-Hr. Lab.	04/20/83
77	McDonald's Restaurant (north)	05/25/83
78	Santa Maria Inn	05/25/83
80	Merle's Auto Parts	05/31/83
81	Royal Car Wash	06/01/83

Enforcement Actions

Restaurants - General

Grease interceptors have been sized, inspected and required for the City's restaurants to bring this sector of industry into compliance with the New Ordinance. The "traps" also serve as preventive maintenance for the City's wastewater collection system.

Gas Stations, Car Washes, Garages:

Oil/sand interceptors have been inspected throughout the year. All businesses known to have these traps were listed on an inspection bench sheet with the most recent inspection date. Priority inspection condidates were determined from this listing by permit status and length of interval since last inspection. Each entity is scheduled to be inspected by the end of 1983.

Los Vineros Winery:

The crush season, September 30, 1982 through November 17, 1982, brought the winery out of compliance with permit conditions. BOD's averaged 8,583 milligrams per liter with a peak of 15,233 milligrams per liter. Suspended solids averaged 1,762 milligrams per liter with a peak of 3,110 milligrams per liter. pH remained consistently low, ranging from 5.8 to 3.69. The winery was monitored and billed as a Heavy-User during this period. Solids were pumped from the settling tanks on October 11 by a hired vacuum truck company and then dumped at the treatment plant facility. This violated the permit agreement which states that all solids must be disposed of either at proper facilities (i.e. Casmalia) or used as a fertilizer on the fields. The winery was charged for the violation.

Enforcement Actions (Cont.)

Ramsey Laboratories:

Ramsey Laboratories discharged a large amount of strawberry solids during the 1982 berry season. The treatment plant operators complained that this clogged the screens at the plant. A slant screen device was installed at Ramsey Laboratories by August 18, 1982. Part of the problem was determined to have been caused by employees pulling up 'floor' screens to wash berries into the sewer. Ramsey Labs was also found to be discharging a Class IV volume of wastewater. Reclassification to the Heavy-User status and appropriate orientation was undertaken. Monitoring and Class IV billing procedures were initiated in October 1982. Compliance has continued throughout the remaining year, however, the berry season may cause a serious increase in BOD's and suspended solids. At last report (April 1983) the company was reconstructing the process lines in an attempt to decrease the amount of solids entering the sewer system. According to company officials, a loss of 20% of the gross product was lost to the sewer system last year due to the employees pulling out the floor screens. Ramsey Laboratories is also constructing a new freezer plant addition to their complex.

Pentachem Company:

Pentachem Company has shown repeated violations of pH level requirements. A recording device was required to be installed on the company's clarifiers on September 24, 1982. The company submitted a compliance schedule which showed a pH monitor incorporated into a pretreatment system which was scheduled to be completed by December 15, 1982. Extensions were granted due to slow shipping and difficulty in completing the project. The Company's permit expired February 28, 1983 and has not been renewed to this date. The pretreatment system was not operational until May 4, 1983.

Enforcement Actions (Cont.)

Currently, analyses of Pentachem's effluent is being undertaken to disclose priority pollutants and/or toxic organic chemicals which may be leaking through to the discharge water. A high COD analysis (38,700 mg/L) supported the possibility. Results from these analyses will determine terms to be stipulated on their new permit.

New Industries

Santa Maria Chili:

Preparations were begun in December 1982 for Santa Maria Chili to hook into the City's sewer system. The company has a high volume discharge of approximately 50,000 gallons per day. Analyses were run on the effluent which showed compliance with the proposed (now adopted) ordinance. All applications were completed for permitting. Completion of the sewer lines is scheduled for July 1983 at which time the company will be inspected and issued a wastewater permit.

Santa Barbara Research Center:

Santa Barbara Research Center began construction of their Santa Maria branch in late 1982. The pretreatment system plans were evaluated and revised. Examination of the permit application indicated that most wastewater would be generated from sanitary and metal plating processes. After completion of the pretreatment system, just prior to beginning operations, a final permit inspection will be made.

Capital improvements this fiscal year included a high pressure hot water washer, portable 3,000 CFM air blower, grating for pre-trickling filter, 6" bench vise, welder, parts cleaner, photo tachometer and various hand tools. The only major maintenance operation this fiscal year was the repair of the digester #3 which included repairing ceiling and repainting with 300 M Cal-Tar Epoxy. Other repairs this fiscal year included repairing and repainting #1 secondary clarifier, replacing two (2) mechanical mixers, replacing bearings and belts on various pumps and replacement of two (2) lift pump motors at the Bower Lift Station and two (2) grinder motors at the wastewater treatment plant. Preventive maintenance program has been minimal because most of the equipment is still under warranty from the plant expansion.

Revenues collected for vacuum truck and septic tank dumpings at the treatment plant amounted to $30,530; the year's total cost for plant operation was $649,653 which includes $122,730 for General Administration Services. During the fiscal year 1982-83, 1,516,000,000 gallons (4.2 MGD) of wastewater was treated at a maintenance and operations cost of $347 per million gallon (not including general administration).

The flow meter was malfunctioning and it took Robert Shaw Company seven (7) months to repair it so the previous fiscal year flows were used in this report. The cost per million gallons is higher because of the decrease in flow and operations and maintenance costs the same as when operating at full capacity. The following table and graph show the comparative measurements over the past ten years.

TREATMENT QUANTITIES & COSTS

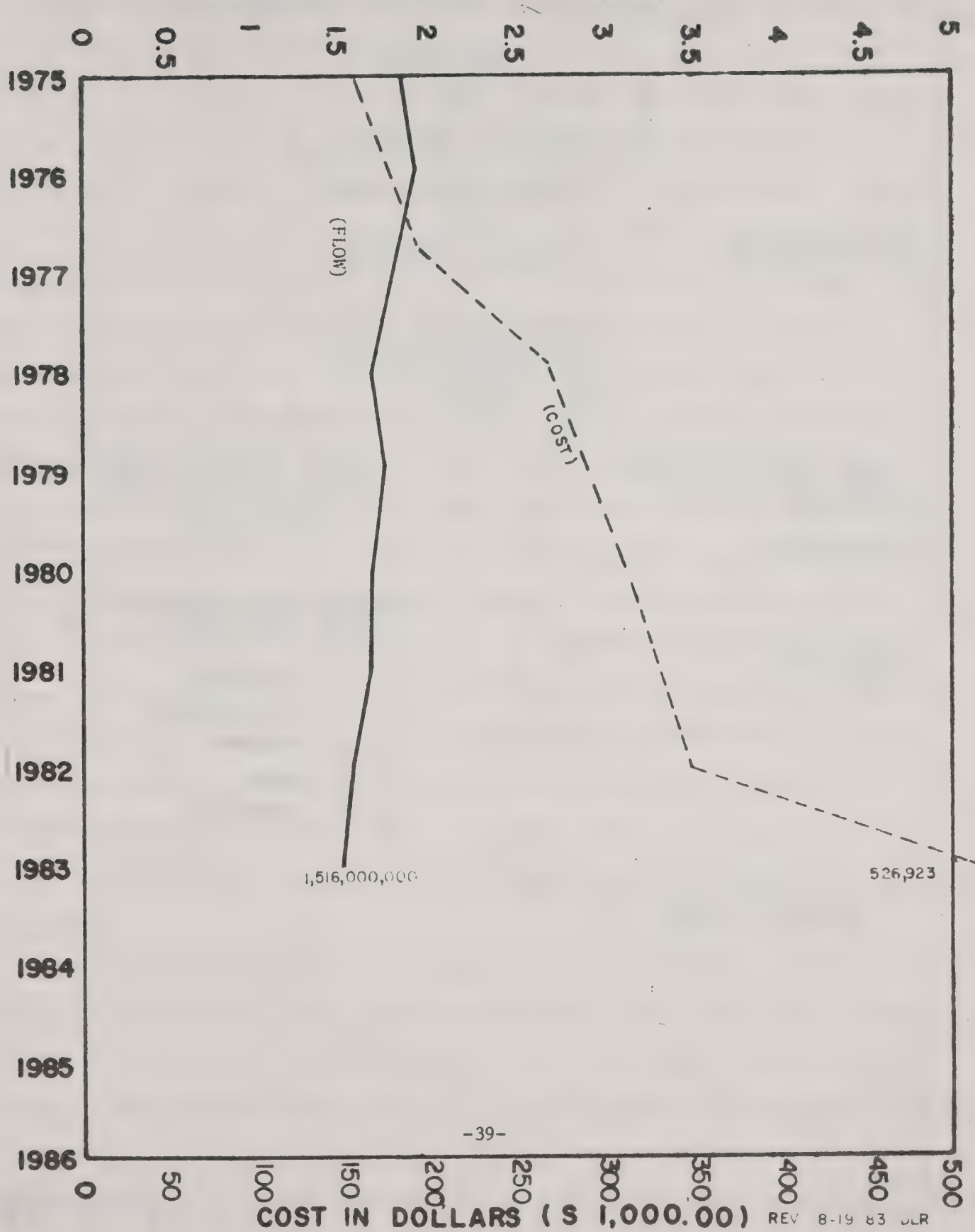
Fiscal	Gallons Sewage Flow	Cost Treatment Per Million Gals.	Cost
1972-73	1,602,693,000	75.09	$120,340
1973-74	1,762,962,000	80.45	147,701
1974-75	1,814,920,000	97.95	177,779
1975-76	1,835,380,000	101.00	185,385
1976-77	1,746,560,000	113.94	199,000
1977-78	1,666,090,000	138.29	230,396
1978-79	1,727,600,000	136.59	235,973
1979-80	1,710,560,000	132.39	226,379
1980-81	1,653,000,000	190.65	315,143
1981-82	1,515,720,000	265.61	402,660
*1982-83	**1,516,000,000	***347.57	526,923

** 4,653 acre feet

*** $113.24 per acre foot

w/Gen. Admin. $428.47/mg
139.62/af

*Note: Flow was low because Robert Shaw Company had meter at the factory for repairs 7 months. Previous year's flow is being used in this report.


SEWAGE FLOW IN GALLONS (10⁹)
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
(FLOW)
(COST)
1,516,000,000
526,923
0
50
100
150
200
250
300
350
400
450
500
COST IN DOLLARS ($ 1,000.00)
REV 8-19 83 DLR

WASTE WATER TREATMENT DIVISION

CITY OF SANTA MARIA
DEPARTMENT OF PUBLIC WORKS

ORGANIZATION CHART

AUTHORIZED

DIRECTOR OF PUBLIC WORKS

ASST. DIRECTOR OF PUBLIC WORKS

SUPERINTENDENT
BEN MIDDLETON

WASTE WATER TREATMENT PLANT LAB TECHNICIAN (1)
D. BERNIER

WASTE WATER SOURCE CONTROL INSPECTOR (1)
A. ALLOWAY

FIELD SUPERVISOR (1)
R. JAKOBSON

WASTE WATER TREATMENT PLANT OPERATORS (5)
1. F. GUERRERO
2. T LA MOREAUX
3. G. HERMAN
4. P. KARR
* 5. J. STEVENS

* WASTE WATER TREATMENT PLANT OPERATOR TRAINEE

REV. 8-19-83 DLR A-292

WATER DIVISION

PRODUCTION

Sixty (60) water samples per month were collected throughout the system by the Water Division personnel for bacteria analysis in compliance with the State Health standards. The analysis in all cases substantiated that the water system is clean. Also as required by State Health standards, tests were performed by the City Water Division on water samples for general minerals-heavy metals, radioactivity, turbidity, color, odor and temperature, all were well within the standards. Repairs were made on approximately ten well chlorinators which included five rebuilt chlorinator pumps. Technical maintenance was carried out on the automatic well control and pressure control system. The system includes telemetering and electronic components at a headquarters main control panel, a failure alarm system, a sub-panel and several remote stations. The water production capability is comprised of 10 water wells and are located within the Santa Maria Public Airport boundaries, with the exception of two, close to the center of the City. The wells furnished an average 7.7 million gallons per day to satisfy the customers' demands. The two ground level and two elevated reservoirs used in conjunction with the wells, have a total of 15.5 million gallons storage capacity. The 6 and 7-million gallon reservoir has increased the "elevated" reservoir capacity to 13.0 million gallons. The combined well production and reservoir capacity must also supply the peak demands of 16 million gallons per day and allow at all times for a reserve fire flow supply. This all amounts to an annual total consumption of approximately 2.8 billion gallons (8,656 AF).

DISTRIBUTION

The water distribution section is responsible for transmitting water from the well source to the people. This service is provided to over 12,137 accounts through a water line system which is approximately 217 miles long. This section also provides the meter reading function, water billing and collection services, installation of service lines, meter maintenance and maintains all water distribution facilities in their entirety. The income from all water sold this fiscal year is shown on

following graph. Totals of various water division functions during the fiscal year 1982-83 are listed as follows:

	FUNCTION	NO. COMPLETED
1.	Water meter readings	72,822
2.	Water service turn-ons	2,149
3.	Water service turn-offs	2,028
4.	Collection (delinquent bills)	1,105
5.	Water meter re-reads	2,350
6.	Miscellaneous service calls	600
7.	New service line and taps installed	395
8.	Water meters installed	1,192
9.	Water meters removed	545
10.	Water meters repaired in shop	727
11.	Water meters repaired in field	1,715
12.	Renovation of water meter locations	1,566
13.	Ball valves installed	934
14.	Water meter vaults installed & replaced	362
15.	Water line leaks repaired	146
16.	Flushing dead-end stations	310
17.	Flushing fire hydrants	291
18.	Fire hydrant repairs, painting & maintenance	480
19.	Main line gate valves operated	669

WATER QUALITY

Ongoing monitoring and testing of the City's water system is to assure that the water is of good quality and within the allowable limits of the State Department of Public Health.

1. Chlorination of the source water is applied at each well which carries the chlorine throughout the system and thus a 0.1 p.p.m. residual of free chlorine is maintained in the extremities of the distribution system. This minimum amount of free chlorine is a positive indicator that any pathogenic material that may have entered the system will be killed off by the chlorine exposure.

2. Bacteriological monitoring is accomplished by collecting a minimum of 14 water samples weekly at various locations in the distribution system and tested in the County Health Department Laboratory in Santa Barbara. Again this year, the excellent and continuing bacteriological free record of the City water system can be attributed to chlorination, flushing of dead-end lines and fire hydrants, and an effective cross connection control program.

3. Ground water source sampling is made on an annual basis for a chemical analysis of each well. These tests show any changes in the water quality relating to mineral content. The average hardness content this past year was 454.6 p.p.m. or 26.6 grains per gallon.

4. Heavy metal analysis of each well source is tested every three years to ascertain that the water is less than the maximum allowed by the United States Public Health Standards and the State of California Department of Public Health requirements for drinking water. Consistantly the water has been within these limits.

THE CROSS CONNECTION CONTROL PROGRAM is primarily a procedure to protect the public water supply from potential sources of contamination. This refers to any connection that could permit toxic or pathegenic material, or materials objectionable to taste or odor, from entering the public water system.

During the past year the following quantities of "backflow prevention" items of work were performed.

ITEM	NO. COMPLETED
Installed	27
Replaced	0
Repaired	0
Tested	0
Installation Inspection	31
Survey Inspection	210
Informational Services	235
Conferences	234
Correspondence Reports	764

The following graph is a plot of annual revenue, costs, and amount of water production. The cost per acre foot reflects costs of operation and maintenance of the system, overhead, plus repair or replacement of deficiencies in the existing system. No new capital outlay costs or bond service is included in the cost per acre foot.

Capital improvements completed or contracts awarded in conjunction with other names projects for 1982-83 fiscal year, consisted of five major replacement projects as follows:

INSTALLATION OF WATER LINES

1.	8" A.C. water line in Santa Maria Way from Miller Street to existing dead-end 870' north	$ 19,391.33
2.	6" A.C. water line in Cypress Street from College Drive to Concepcion Avenue	16,048.27
3.	East Transmission Main Phase II in Suey Road from Jones Street to Donovan Road	365,106.14
4.	6" A.C. water line in alley north of Tunnell Street from McClelland Street to East Avenue	48,856.92
5.	6" A.C. water line in alley north of El Camino Street from McClelland to Vine	39,689.77
6.	6" A.C. water line in Camino Colegio from Broadway to Miller Street	32,053.00

INSTALLATION OF WATER LINES (CONT.)

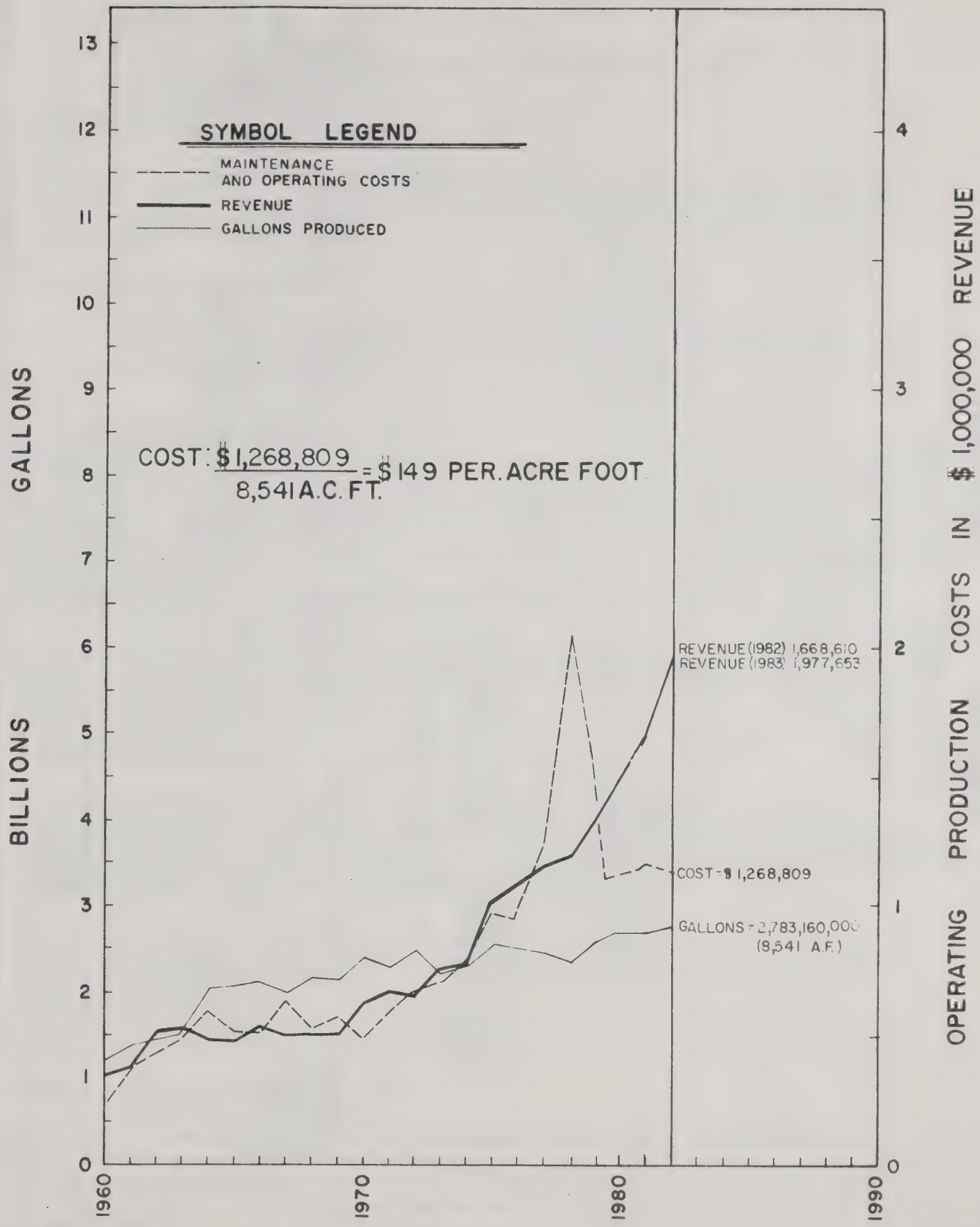
7.	6" A.C. water line in Camino Colegio from Miller Street to Oakwood Drive	$ 16,079.20
8.	6" A.C. water line in alley north of Hermosa from alley east of Broadway to Vine Street, Miller Street to East	41,622.00
9.	Rehabilitation of 6 M.G. reservoir roof	165,173.93
		$744,020.56

The continuation of the present level of service to the public during the budget year of 1982-83 caused the purchase of equipment and replacement as follows:

1.	New water meters	$ 55,960.00

ANNUAL~WATER PRODUCTION

DELIVERED COSTS, SALES REVENUE



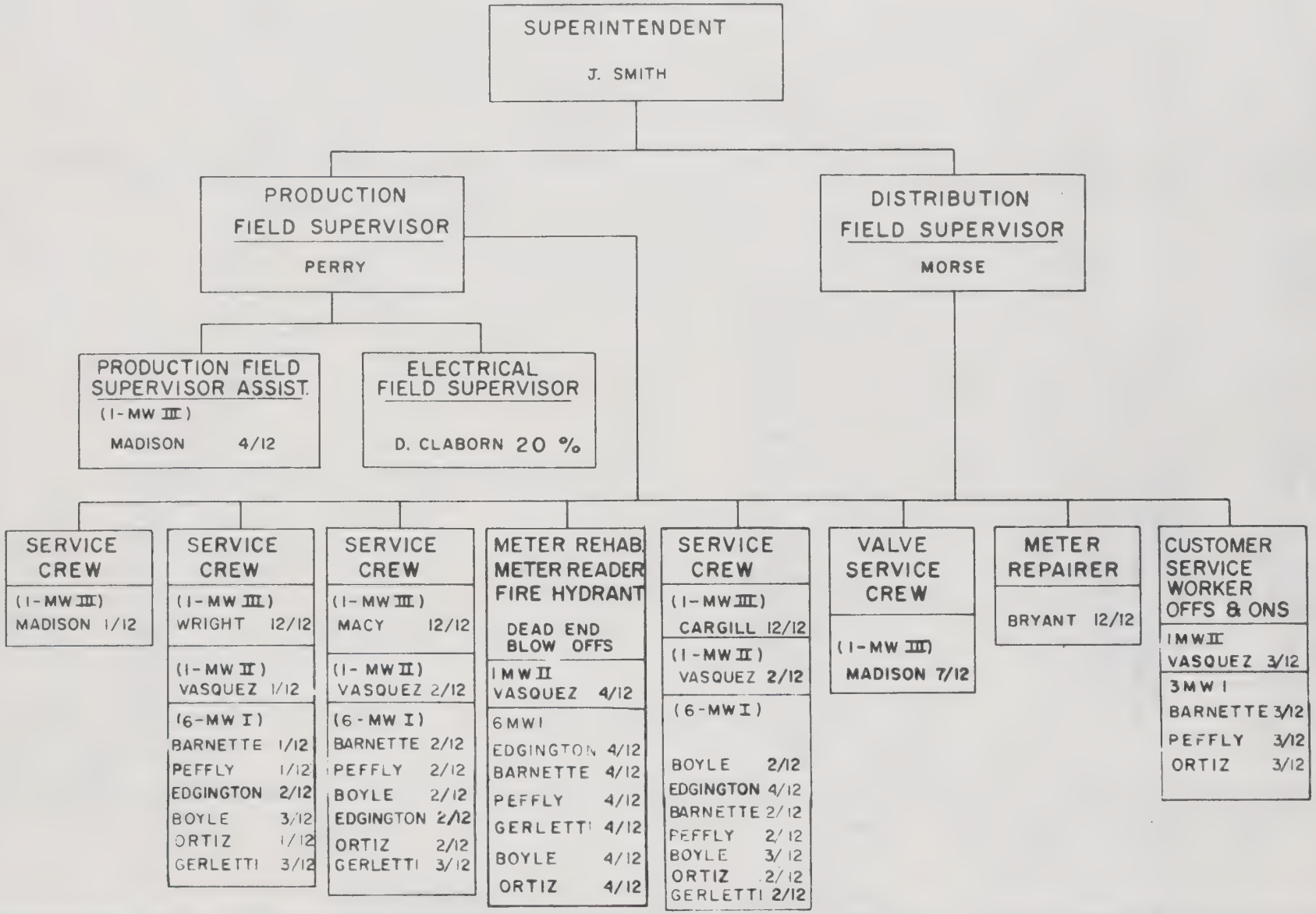
REVISED 8-17-83 DLR

WATER DIVISION

PUBLIC WORKS DEPARTMENT

ORGANIZATION CHART

EXISTING



REV. 8-83
REV. 1-82 P.J.C. A-204

ENGINEERING, OPERATIONS & ADMINISTRATIVE STUDIES

Standard Specifications & Standard Drawings

The standard specifications and drawings are available through this office and have been updated and revised through this year. These specifications and drawings indicate typical approved methods and materials for all types of Public Works construction.

Microfilm & Indexing System

On a continuing basis, all drawings, maps, specifications and photographs produced during the year are microfilmed, mounted on aperture cards and filed with all other documents and records.

Four Year Capital Improvement Program

Along with each of the City departments, the Public Works Department developed recommendations for capital improvements deemed desirable over the next four years. This information, after coordination with other departments and comparison with our financing capabilities by the Administrator's office, resulted in the separate published capital improvement program.

Engineering Division Forms and Checklists

The Engineering Division has developed standardized forms to aid in the consideration and evaluation of subdivision maps and public improvement drawings. These standardized forms are evaluated and revised on a continuing basis throughout the year.

Santa Maria Area Transit (SMAT) Service

During the fiscal year the Area Planning Council completed SMAT's Short Range Transit Plan 1982-87. This plan, among other documents, was required in the City's application for operating and capital assistance funds from the Urban Mass Transportation Administration. The plan includes many recommendations for an orderly expansion of SMAT based on existing and projected service levels.

Continuation of an aggressive marketing program resulted in increased awareness and passenger use. This was accomplished through the news media, mass mailing programs and community events.

Overall the fiscal year was very significant in establishing and planning major changes in the next five years.

North Broadway 2-Way Left Turn Lane

This Traffic Committee study of North Broadway, from Fesler Street to Donovan Road, to reduce the high accident history was recommended for further review. It was decided not to proceed with the recommendation of a two-way left turn lane and elimination of on-street parking until acceptance from the majority of property owners.

Westside Redevelopment

Phase I of the Westside Redevelopment is a program to revitilize the four block area bounded by Pine, Chapel, Broadway and Church Streets. Property was acquired by the Redevelopment Agency and Public Works has assisted in the design and provided construction contract administration for the completion of new parking lots at Pine and Chapel and in the 100 and 200 blocks of W. Church Street.

Phase II covers a four block area bounded by Pine, Church, Broadway and Cook Streets and is planned to be a new shopping mall (Central City Square) with two major department stores and connected to the existing Santa Maria Town Center by a bridge across Broadway. The bridge as currently envisioned would contain retail space as well as providing vehicular and pedestrian access between the shopping centers.

Public Works will be involved in the administration of the contracts for the building demolition and the construction of the public improvements as well as assisting the consultants in all of the required studies and designs.

Sewer Basin Study

The City has contracted with John Carollo Engineers to analyze the McCoy, Inger and Enos sewer basins. The work consists of estimating the ultimate flow in each section of sewer based on the present land use designation for areas that would reasonably be served in the particular basin. The physical data (size, slope, etc.) on each reach is compiled and along with the estimated flows is entered into a computer using the McAuto Sewer Program. The print out tabulates all of the input information and provides the capacity of the sewer line and the flow as a percent of the capacity of the particular reach. At this point, system deficiencies can be identified and the size and routing of relief lines can be planned.

Any changes in the parameters can be easily input into the computer and a new printout produced without the lengthy calculations required without the computer.

Traffic and Circulation Studies

Three significant traffic and circulation studies were completed as a result of increasing developments. The Carlotti Drive/North Broadway study was initiated by the developments on Carlotti north of Donovan and was expanded to include the vacant land north of Donovan along Broadway. This study is currently under review for the purpose of financing the many traffic control devices recommended and major improvements to the circulation system.

The pending developments for the Marian Medical Center and the area east of the center initiated a traffic study for the impact to Main Street, Palisade Drive and Suey Road. This study has been accepted and the recommendations will be implemented as soon as the traffic warrants are met. Both the Carlotti/Donovan and Marian Medical Center studies were completed by Associated Traffic Engineers.

The study for the Airport area was as a result of 4 planned developments. It was the City's recommendation that the Airport initiate a long overdue study of existing and future developments for an impact of traffic circulation within and outside the Airport. This study was completed by Gerald Skiles. Currently there are 2 new traffic signal locations planned as a result of the study. The City will use this plan for further circulation and traffic control devices.

APPENDIX B

Financial Information

FUNCTION	Overhead	F.Y. EXPENDITURES Operations	Capital Outlay	Bond Service	FUND SOURCE (S)	
					General	94,400
					Water	12,950
					Refuse-Coll.	9,400
					Refuse-Disp.	3,680
ADMINISTRATION		127,210	150		Sewer	6,930
					General	214,910
					Water	27,800
					Refuse-Coll.	20,180
BUILDINGS		266,130	19,550		Refuse-Disp.	7,900
					Sewer	14,890
					General	270,310
					Water	39,320
					Refuse-Coll.	28,550
					Refuse-Disp.	11,180
ENGINEERING		370,910	5,500		Sewer	21,050
					Gas Tax	6,000
					General	1,398,130
STREETS		1,367,940	764,290		Gas Tax/TDA	734,100
SEWERS	24,700	71,320		14,620	Sewer	110,640
WASTEWATER	102,760	526,920	9,140		Sewer	638,820
SAN.-COLLECTION	174,260	932,890	14,440		Refuse-Coll.	1,121,590
SAN.-DISPOSAL	73,090	355,380	523,040	29,800	Refuse-Disp.	981,310
DRAINAGE		32,470			General	32,470
WATER	261,890	1,044,440	644,490	21,920	Water	1,972,740
MECH. MAINT.		994,280	*541,390		Equipment	1,535,670
PARKING DISTRICT		1,720			District	1,720
STOWELL CENTER		7,420			Maint. District	7,420
PARKING AUTHORITY		194,980		621,210	General	816,190
SMAT		329,820	104,280		Transp. Dev. Act.	434,100

NOTE: The above information should not be used as final audit figures, but are reasonably accurate for the purpose of this summary

* The annual equipment replacement program expenditure is included in this figure.

PERSONNEL NOTES

The total permanent employees working in the Public Works Department during fiscal year July 1, 1982 to June 30, 1983 amounted to 94, which included all the divisions.

The number of positions vacated in the department as a result of employees that either retired or left the City for personal reasons consisted of the following:

1 - Maintenance Worker I	Jay Bauguess	Left City	02/12/83
5 - Maintenance Worker II	Manning Bogue	Retired	07/07/82
	Richard Caballero	Retired	09/28/82
	Charlie Corral	Retired	12/31/82
	Phil Holder	Left City	06/24/83
	Jesse Lemos	Left City	11/22/82
1 - Equipment Mechanic II	Del Walters	Left City	02/04/83
1 - WTP Industrial Source Control Inspector	Brad Loe	Left City	07/09/82

The above constitutes a turnover rate of 8.5% for all employees who left for personal reasons.

Summer programs were provided and training was carried out for a total of eleven (11) Work Aides of primarily high school age young adults in the following areas:

4 - Buildings
3 - Streets
2 - Wastewater
2 - Water
11 TOTAL

Two (2) employees worked in the Public Works Department under the Neighborhood Youth Corps Program, which is financially supported by State funds to provide work experience and financial aid.

1 - Sanitation
1 - Buildings
2 - TOTAL

EMPLOYEE ROSTER

DIRECTOR OF PUBLIC WORKS
Riddiough, Reese

ADMINISTRATIVE DIVISION

PERSONNEL

Albright, Kathy
Holling, Wendy
** *Rios, Toni*

ASSISTANT DIRECTOR OF PUBLIC WORKS

Sinn, Jeffrey

ENGINEERING DIVISION

PERSONNEL

Chandler, Phyllis
**Condiff, Teddy*
Diaz, Lee
Kirkpatrick, Mike
Palato, Carman
Pantoja, Henry
Rios, Harold C., Jr.
Soares, Herbert
Ujano, Lorenzo
Wall, Robert
Zuspan, John

BUILDING DIVISION

SUPERINTENDENT

Anderson, Norman

PERSONNEL

**Almaguer, Tony*
**Gooding, Joyce*
**Harper, Kathryn*
Johnson, Roy
**Larsen, Deonne*
Marsh, Harold
**Reber, Nanette*
**Robinson, Robert*
Roth, Robert
**Salgado, Joe*
Stockton, Loy
**Valadez, Fernando*

WASTEWATER DIVISION

SUPERINTENDENT

Middleton, Ben

FIELD SUPERVISOR

Jakobson, Russell

PERSONNEL

Alloway, Anne
Bernier, Dennie
Guerrero, Froyland
Herman, Gary
Karr, Paul
LaMoreaux, Tom
Stevens, John
**West, Mike*

STREETS & SEWERS DIVISION

SUPERINTENDENT

Williams, Bill

SUPERVISOR

Claborn, Dale (Electrical)
Galvan, Tony (Streets)

PERSONNEL

Cadriel, Agustin
Cargill, John
Gauna, Robert
Johnson, Robert
Johnson, Steve
Martinez, Mario
Nartatez, John
Olivera, Theodore
**Pantoja, Anthony
Riveria, Florante
Smith, Ron
Soto, Percy
Torres, Jesse
Ujano, Robert
Velasquez, Dario
Walker, William

SANITATION DIVISION

SUPERINTENDENT

Noble, Bill

SUPERVISOR

Miranda, Pete (Disposal)
Montes, Albert (Collection)

PERSONNEL

Anaya, Ernest
Brown, Billy
Brown, Luis
Carrell, Bryan
Chavez, Michael
Coleman, Sheryl
**Flores, Ruben
Hernandez, Rudy
Holder, Phillip
Kelly, Bill
Knopf, Mike
Limon, Arthur
Lopez, Silvestre
Medrano, Ron
Merino, Chris
Meriot, Francis
Moreno, Mark
**Rafferty, Hugh
**Rodriguez, Mark
**Rogers, Dale
Sanchez, Gregory
Torres, Joe

WATER DIVISION

SUPERINTENDENT

Smith, Jesse

SUPERVISOR

Morse, Carmel (Distribution)
Perry, Jim (Production)

PERSONNEL

Barnette, Ralph
Boyle, Bret
Bryant, Wayne
Cargill, Jim
Edgington, Rick
Gerletti, Marvin
Macy, Steve
Madison, Melvin
Ortiz, Daniel
Peffly, Steve
Vasquez, Henry
Wright, Frank

MECHANICAL MAINTENANCE DIVISION

SUPERINTENDENT

Ramirez, Hank

SUPERVISOR

Merino, George

PERSONNEL

Azcarate, Larry
Boyd, Dean
Bracamonte, Daniel
**Falcon, Mathew
Galvin, Robert
Hart, George
Martin, Jerry
Uriarte, T.
West, Millard
Williams, Larry
**Willis, Steve
Wolf, Marcelino

**Part Time

U.C. BERKELEY LIBRARIES
C123323259

INSTITUTE OF GOVERNMENTAL STUDIES LIBRARY
109 PHILOSOPHY HALL
UNIVERSITY OF CALIFORNIA
BERKELEY, CA 94720